











At or Above Plan No Information Not Started Below Plan

Caution

Completed

### Objectives



1.1 Develop cost-effective and environmentally friendly sources of energy; Create solutions to save our coast and waterways; Engineer better healthcare; Provide a safer and more costeffective national infrastructure; Improve America's manufacturing competitiveness.

Develop a formal operational structure through the development of a research 1.1.1 network within the College to facilitate interdisciplinary, collaborative efforts in the following areas: sustainability, safety, resiliency, buildings, manufacturing facilities, roads and bridges, power plants, electrical grids, computing systems, software, cybersecurity, informatics systems, intelligent systems and visualization technology.



1.1.2 Build lasting relationships with funding agencies interested in infrastructure, and obtain stable funding in support of faculty research.



Through the U.S. Department of Commerce's Investing in Manufacturing 1.1.3 Communities Partnership (IMCP) designation, the Smart Industrial Manufacturing Institute (SIMI) will be established to leverage the broad partnership of 83 leading organizations across all sectors of the petrochemical industries in Louisiana.



1.1.4 Nurture collaborative relationships with owners and operators of critical infrastructural systems in Louisiana, including, but not limited to, electrical power industry, grid operators, government agencies of the road network and other public infrastructural systems.



1.1.5 Build university and industry-cooperative research initiatives, teams and centers.

### Analysis UPDATE

### From the last assessment cycle (2020):

Objectives 1.1, 1.1.1 and 1.1.4 in the area of Infrastructure are meeting or exceeding targets due to the large increase in research funding obtained by the Construction Management faculty. The CM research production per faculty is 4:1 as compared to the

CoE. Developing a formal operating research network in the college (Objective 1.1.1) is not moving forward in a manner that is positive due to the lack of interest among a lot of faculty to work in other disciplines.

### Current assessment cycle (2020)

Collaborative research is gaining momentum with the CM Department. As Objective 1.1 and 1.1.1 are exceeding targets. Objectives 1.1.2 through 1.1.5 are directly related to the Louisiana Chemical Manufacturing Initiative lead by the CM Department. The Louisiana Chemical Manufacturing Initiative (LCMI) With the change in federal administration, the amount of awarded federal grants has substantially dropped from \$75 million to \$10 million. The federal support for this program has waned in the past year. There was in the past year. There was an attempt to move this program with two other federal centers under ORED so as to keep the momentum with industry. The CM Department found little support to make this move.

## **Recommendations UPDATE**

It might be the time to discuss the addition of an Associate Dean of Research to lead a formal cross-disciplinary research network. As it stand today, research in the CoE does go across discipline, but it is not the standard of operations. As noted from the last two assessment cycles, the CM Department needs to continue to hire faculty each year to maintain research performance and to meet strategic needs of LSU. One new faculty line was approved during this cycle as the Department continues to grow. It is also recommended that the Department continues it's initiative to explore avenues from which it can develop an institute or center that can house the federal centers and the Department while partnering with industry to met there needs.

### Initiatives

- Organize a college wide workshop to formalize collaboration
- Develop Institute under ORED
- ♠ Obtain approvals for a PhD in Construction Management
- Develop a school, institute or center for industry and academic collaboration

### Goals

### 2.0 Educate the Workforce of Tomorrow

### Objectives

- 2.1 Promote an undergraduate and graduate environment that develops and encourages a diverse set of management and leadership skills.
- 2.2 Enhance global awareness and an international education experience among our students.
- 2.3 Emphasize concepts of safety and sustainability among graduates.
- 2.4 Impart a strong sense of appreciation of and commitment to local and global community.
- 2.5 Train our graduates for academic careers.
- 2.6 Increase the quality of LSU's annual entering freshman class.

#### **Analysis UPDATE**

Objective 2.3 has been modified in the area of safety to better meet the needs of the CM students. This area will be monitored closely in the next cycle. It should be an issue as the Department has a partnership with Alliance Safety Council as an OSHA training center.

Attention to recruiting and retention has increased enrollments as well as keeping the students in the keeping the students in the curriculum. Total student enrollments continue to increase each year (2016 -14.1%; 2017 - 11.2%, 2018 -3.0%, 2019 - 6%). The BSCM students are scoring higher than national averages on the American Institute of Contractors (AIC) exam. Graduate enrollments continue to increase due to international exposure and to CM's online presence as a Best Online Program as reported by the 2019 US News and World Report.

These numbers below indicate a detrimental affect on the Department's ability to achieve Objective 2.2 and 2.4 as it relates to service learning, international educational experience and global awareness. The faculty work load has increased significantly due to increased research grant funding and increased enrollments (based on 2018-2019 LSU Budget and Planning metric):

- Research expenditures per tenure/tenure track faculty: CoE- \$185,785 vs CM -\$232,322
- Majors per total Faculty: CoE 37.3 vs CM 63.0 (LSU excludes CM PhDs as they are under Engineering Science)
- Student Credit Hours per Total Faculty: CoE 526.0 vs CM 1060.3
- Degree per Total Faculty: CoE 8.4 vs CM 21.2

### **Recommendations UPDATE**

Need to continue hiring faculty to keep up with Departmental growth.

#### **Initiatives**

- Develop a plan to acquire new faculty lines
- ♠ Obtain approvals for a PhD in Construction Management
- Complete BIM Laboratory in newly renovated Patrick Taylor Hall
- Review curriculum and resources for BIM integration into the core curriculum
- Create an online Post Baccalaureate Certificate in Industrial Facilities Management
- Expand matriculation agreements with community colleges
- Review curriculum and resources to integrate sustainable construction into the core curriculum
- Develop a recruitment plan for BSCM students
- Develop a 5-year BSCM to MBA fast path program
- Develop dual degree program BSCM and BS in Entrepreneurship
- Develop a school, institute or center for industry and academic collaboration
- Create an LSU Online Bachelor in Construction Management

### **Action Items**

- Correct the funding model for the CCM online program
- Explore the option to integrate the BIM Course into the core curriculum.
- ♣ Hire at least one new faculty member for 2019

- Address recommendations from ACCE accreditation visit for BSCM and MSCM
- ♠ Enhance student assessment of learning for BSCM and MSCM

### Goals

3.0 Redefine Our Social Network

### **Objectives**

- 3.1 Foster trust and loyalty among our corporate partners by providing superior customer service and access to talented graduates.
- 3.2 Develop mutually beneficial relationships with our alumni to ensure lifelong devotion to the College. Build perpetual support from our donors by providing timely acknowledgement of their gifts and implementing creative stewardship.
- 3.3 Solidify a cohesive brand for the College that is recognized by all major constituent groups. Maintain a strong relationship with the local media, while creating and fostering connections on the national level, to shape a positive public opinion. Propel sharing and engagement of earned media through paid promotion and advertising.

### **Analysis UPDATE**

All Initiatives and Action Items related to this goal has been completed. Almost all of the targets are being met for each objective. There has been a significant increase in social media activity. The Department of Construction Management continues to grow its following and engage students, industry representatives, alumni, and the Baton Rouge community. The effort to curate and creates interesting content was successful; however, due to the drop in Distinguished Student Leaders (DSL) and action item has been added for Objective 3.1.

### **Recommendations UPDATE**

Continue to work with the College of Engineering as well as LSU Strategic Communications to ensure that our communication practices are correct and that we help maintain the overall university brand. The Department needs to continue to target individuals on social media who may be interested in the BSCM, CCM, or MSCM online programs. In addition, we need to closely monitor the new Action Item for the DSLs.

#### **Initiatives**

Update alumni contact information

Develop a recruitment plan for BSCM students

### **Action Items**

Add job opening widget to our CM website

Provide CM staff access to Careers2Geaux website

Update CM alumni website

- Sponsor a Facebook "like' campaign
- Complete a joint campaign with CIAC, the CM Alumni, ABC and AGC to link CM website
- Link CM Online Programs to all CM social media
- Fully develop a CM Distinguished Student Leader (DSL) program

## **Goals**

4.0 Reinvent How We Do Business

### Objectives

- 4.1 Maintain a system of thinking where creativity, innovation and automation converge to maximize every dollar spent.
- 4.2 Foster an environment where communication is kind and timely.
- 4.3 Provide faculty, staff and students with the tools needed to maintain positive energy balance among work and life.

#### **Analysis UPDATE**

Most all targets are being met for each objective. The Department added 4 new revenue generating programs - online BSCM and PBC in Facilities Management, and two MicroCreds in Introduction into CM and Construction Technology Management. Communication within the department are excellent as fewer meetings are needed due to the completion of most of the Initiatives and Action Items. Objective 4.3 still behind schedule and has yet to start due the lack of staffing in 2019.

### **Recommendations UPDATE**

During the summer, the Department needs to develop an operational/department improvement survey.

### <u>Initiatives</u>

- Create an online Post Baccalaureate Certificate in Industrial Facilities Management
- Develop standard operating procedures (SOP) for the CM Department
- Create a departmental survey for systems and operational improvements
- Create an LSU Online Bachelor in Construction Management

## **Action Items**

- Continue to explore avenues for an Industrial Innovation Center.
- Develop and operational/department improvement survey
- Explore developing online credentialing for those without an undergraduate degree

# **Objective Summary Report**

#### Objectives

**1**.1

1.1 Develop cost-effective and environmentally friendly sources of energy; Create solutions to save our coast and waterways; Engineer better healthcare; Provide a safer and more cost-effective national infrastructure; Improve America's manufacturing competitiveness.

#### **Analysis**

Seven of the nine measurements are meeting or exceeding expectations. Two are just below targeted. The newly funded proposals related to Energy was slightly below targets. The target for the total amount of proposals submitted is calculated using CoE's Sponsored Program Proposals divided by the number of CoE tenure/tenure track faculty times the number of CM tenure/tenure track faculty. Again, it is just below the CoE's actuals.

#### Recommendations

No action is needed during this next assessment cycle. Efforts continue to create an Industrial Innovation Center.

## Action Items

Continue to explore avenues for an Industrial Innovation Center.

### Objectives

1.1.1 Develop a formal operational structure through the development of a research network within the College to facilitate interdisciplinary, collaborative efforts in the following areas: sustainability, safety, resiliency, buildings, manufacturing facilities, roads and bridges, power plants, electrical grids, computing systems, software, cybersecurity, informatics systems, intelligent systems and visualization technology.

#### **Analysis**

Collaborative efforts in proposal writing and journal manuscripts are at an all time high, exceeding targets; however, their is no formal operational structure within the College.

## **Recommendations**

None at this time

## **Objectives**



1.1.2 Build lasting relationships with funding agencies interested in infrastructure, and obtain stable funding in support of faculty research

#### **Analysis**

No information provided as the LCMI is going through fundamental changes at the government level.

#### Recommendations

Monitor the activities at the federal levels.

#### **Action Items**

Continue to explore avenues for an Industrial Innovation Center.

### **Objectives**

1.1.3 Through the U.S. Department of Commerce's Investing in Manufacturing Communities Partnership (IMCP) designation, the Smart Industrial Manufacturing Institute (SIMI) will be established to leverage the broad partnership of 83 leading organizations across all sectors of the petrochemical industries in Louisiana.

### Analysis

See Objective 1.1.2

### **Action Items**

Continue to explore avenues for an Industrial Innovation Center.

### **Objectives**

1.1.4 Nurture collaborative relationships with owners and operators of critical infrastructural systems in Louisiana, including, but not limited to, electrical power industry, grid operators, government agencies of the road network and other public infrastructural systems.

### <u>Analysis</u>

See Objective 1.1.2

### Objectives

1.1.5 Build university and industry-cooperative research initiatives, teams and centers.

### <u>Analysis</u>

See Objective 1.1.2

#### **Action Items**

Continue to explore avenues for an Industrial Innovation Center.

### Objectives

2.1 Promote an undergraduate and graduate environment that develops and encourages a diverse set of management and leadership skills.

### **Analysis**

Exceeding targets as it relates to graduation numbers. Enrollment targets are set at 15%over previous year. In this cycle, enrollments came close but did not meet the targets. Most all

targets have been met with exception of the number of Sigma Lambda Chi members, degrees awarded to females and degrees awarded to underrepresented students.

Once again, Annual Student Credit Hours

(SCH) per faculty, degrees awarded per total faculty, majors per total faculty, and enrollments per total faculty easily met their targets; however, they were so far beyond the target that they were flagged an "unacceptable range" (2x - 4x times the college average). The is due to the low number of faculty as compared to rising enrollments and teaching loads.

Overall, the Department is doing a great job promoting undergraduate and graduate environment.

#### Recommendations

Even with the additional faculty line, enrollments have increased faster than resources acquired. As for the items that have yet to make targets, the Department implemented CxC in the curriculum in the 2016 cycle and hired an Operations Manager to oversee recruiting. It will take another year to see improved results. The BIM course is offered each semester and it has been incorporated into the core curriculum (completed Action Item). The Department needs to closely monitor related measures this next cycle to see if the numbers change.

#### Action Items



Correct the funding model for the CM online program



Explore the option to integrate the BIM Course into the core curriculum.



Hire at least one new faculty member for 2019

#### Objectives

2.1.1 Enhance student's critical thinking and communication skills

### **Analysis**

Still not meeting the targets for this objective.

#### Recommendations

There needs to be a formal process to recognize DSLs. This would highlight the importance student extracurricular involvement. The Department continues to struggle with the Distinguish Communicator process, even though it is integrated into the degree program three years ago. This need to be monitored closely in the next two cycles to see if this number increases.

#### Action Items



Fully develop a CM Distiquished Student Leader (DSL) program

#### Objectives



2.2 Enhance global awareness and an international education experience among our students.

### **Analysis**

No data for this objective.

#### Recommendations

Current student growth and limited resources make this objective difficult to obtain. No recommendations at this time until more resources become available.

#### **Action Items**



Hire at least one new faculty member for 2019

## **Objectives**



2.3 Emphasize concepts of safety and sustainability among graduates.

### **Analysis**

Not meeting targets for the number of students and course focused on safety. This is due to the change in how the 72 OSHA hours are delivered. Instead of being across the curriculum in 7 courses, in is now in two courses dedicated to safety. Sustainability is integrated into the curriculum and is meeting the targets.

### Recommendations

The second course in safety was recently developed. Need to monitor during the next cycle to see if the actual results increase. Even though sustainability has been integrated into the curriculum, Program Student Learning Outcomes assessments indicate an area of weakness. A standalone course is being developed (an Acton Item) that can be integrated into the core CM curriculum.

#### Action Items

BSCM - Explore curriculum for place content for sustainability topics. CM Student Learning Outcomes

### Objectives



2.4 Impart a strong sense of appreciation of and commitment to local and global community.

### **Analysis**

No data available

### Recommendations

As noted in the last assessment cycle. The integration of service learning modules require extensive resource management. With a limited number of faculty, this goal is not attainable; however, faculty, staff, and students are involved in various service activities

## Action Items

1

Hire at least one new faculty member for 2019

### Objectives

2.5 Train our graduates for academic careers.

#### **Analysis**

The Department is meeting all targets except campus MSCM. The ratio for T/TT faculty to students is almost 3x above CoE's number and is noted as an unacceptable range.

### Recommendations

It as anticipated that the campus MSCMs would decline due to the online delivery; however, almost all of the PhDs are obtaining the MSCM along the way. This is not reflected int the Budget and Planning sheet. with over 30 PhDs in the program, this target is probably being met.

There has been one approved faculty line in 2019. Search began in November 2019 (Action Item). More faculty is needed as the Department moves forward with research and teaching.

#### **Action Items**



Hire at least one new faculty member for 2019

## Objectives

2.6 Increase the quality of LSU's annual entering freshman class.

## Analysis

Retention has improved and is exceeding targets. The number of entering freshman is at historic highs. Yield rates continue on a mostly upward trend (a slight decline this cycle but with no concerns). No data available for freshman graduation rates.

### Recommendations

none

#### Objectives

**3.1** Foster trust and loyalty among our corporate partners by providing superior customer service and access to talented graduates.

#### Analysis

Industry continues to seek out the CM students for employment. Targets are being met except the number of students with jobs at time of graduation is declining. With the number of jobs available to students this cannot be accurate. After a careful review, it seems that some of the students are not filling out that section because it asks for company name and address (they don't know the address).

#### Recommendations

Since Olinde Career Center lost their person that did the surveys, accurate data has become an issue for all programs. The Department will continue to press graduating senior to accurately complete the survey, but will explore options at the next faculty meeting.

## Action Items

V

Add job opening widget to our CM website



Provide CM staff access to Careers2Geaux website

### **Objectives**



3.2 Develop mutually beneficial relationships with our alumni to ensure lifelong devotion to the College. Build perpetual support from our donors by providing timely acknowledgement of their gifts and implementing creative stewardship.

### <u>Analysis</u>

The number of gift given to the department has gone up by 33% since the last cycle while articles and highlights of alumni increased by 233%. The large increase is due to the efforts of our newly hired Operations Manager.

### Recommendations

none



### **Action Items**

Update CM alumni website

### Objectives



3.3 Solidify a cohesive brand for the College that is recognized by all major constituent groups. Maintain a strong relationship with the local media, while creating and fostering connections on the national level, to shape a positive public opinion. Propel sharing and engagement of earned media through paid promotion and advertising.

### **Analysis**

All Action times for this objective have been completed. As a result, all targets are being met except the number of students recognized at DSLs. The number of Facebook like has increased by 6.2%, the number of sessions on the CM webpage has increased by 8.3%, the number of contact through LinkedIn has increase by 41%, annual engagement rate remains static and the number of faculty recognized for the achievement has increased 105%. All of these increases can be attributed to the efforts of CM's Operations Manager.

## Recommendations

There need to be a better concerted effort to formally recognize students for their achievement. This can be done not only through social media but also though the full development of a Distinguished Student Leader (DSL) program.

### **Action Items**

V

Sponsor a Facebook "like' campaign



Complete a joint campaign with CIAC, the CM Alumni, ABC and AGC to linkCM website



Link CM Online Programs to all CM social media



Fully develop a CM Distiguished Student Leader (DSL) program

### Objectives



4.1 Maintain a system of thinking where creativity, innovation and automation converge to maximize every dollar spent.

### **Analysis**

Last cycle had a total of 5 revenue generating areas - three federal centers and two online programs. This now has increased to 9 total with the addition of the online BSCM, two MicroCreds, and one PBC in Facilities management.

### Recommendations

Continue to explore revenue generation streams.

# Action Items



Explore developing online credentialing for those without an undergraduate degree

#### Objectives



4.2 Foster an environment where communication is kind and timely.

### **Analysis**

Meeting the target. Meetings this cycle decreased due to the completion of Action Items and Initiatives.

### Recommendations

None

### Objectives

**♣** 4.3 I

4.3 Provide faculty, staff and students with the tools needed to maintain positive energy balance among work and life.

### <u>Analysis</u>

This has yet to be started.

#### Recommendations

Generate survey (action item)

### **Action Items**



Develop and operational/department improvement survey